

Habitat fragmentation does not lead to complete loss of natural habitat, but modifies the form of an area sufficiently to threaten the functioning of the ecosystem. The fragmentation is usually by human action such as, for example, the clearing of forest or grassland for agriculture, residential development or overland electrical lines.

Three aspects are considered to quantify habitat fragmentation at the landscape level. Those three aspects relate to surrounding land use (matrix resistance), average size of fragments of natural vegetation, and connectivity (distance between fragments). The extent of habitat transformation ranged from 0 (natural 1x1km block) to 100 (transformed 1x1km block) and the average fragment size value from 0 (average fragment size: 22641 ha) to 100 (average fragment size: 1 ha). Vegetation types were reclassified into four categories (very low, low, medium and high) of habitat fragmentation using equal intervals.

Fragments of natural vegetation are mapped to quantify the ability of a species to move through various land cover types. This map shows an index measuring the extent of habitat fragmentation within Limpopo Province.

This map contains the following layer:

- Fragmentation index (indicating low to high fragmentation)
- Settlements settlement polygons created by DWAF
- Mesozones (base layer) spatial unit type created for GAP for meso-level use.
- Basemap layerset contains roads, administrative areas etc.

Source: South African National Biodiversity Institute, <u>www.sanbi.org.za</u>